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**A Golden Age of Rice?**

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Rich Kozlovich

Last month, we [reported](http://www.acsh.org/a-golden-age-of-rice/) on a study demonstrating the hugely beneficial effects of genetically modified “golden rice” that provided children in China with adequate levels of vitamin A. For the study, which was published in the American Journal of Clinical Nutrition in August, researchers from Tufts Medical Center and the Zhejiang Academy of Medical Sciences in China looked at 68 children and found that, based on blood tests taken over three weeks, golden rice was as effective as vitamin A supplements and worked even better than spinach to provide kids with vitamin A.

Vitamin A deficiency kills 670,000 children under five each year while causing blindness in an additional 250,000 to 500,000. The genetically modified golden rice has been heralded as a major public health breakthrough.

[**Genetically modified rice a good vitamin A source**](http://www.reuters.com/article/2012/08/15/us-genetically-modified-rice-idUSBRE87E0RO20120815)  
Last year, ACSH reported on progress involving new developments in “Golden Rice.” Developed by Ingo Potrykus of The International Rice Research Institute (IRRI) about ten years ago, it portends to become the world’s first-ever beta-carotene-rich grain.

Now, a recent study has found that Golden Rice is just as effective and even better than supplements and many foods in supplying children and adults with their daily requirement for Vitamin A. The study, published in the American Journal of Clinical Nutrition, tested Golden Rice against both spinach and supplements in providing Vitamin A to 68 six-to eight-year-olds in China. Based on blood tests taken over three weeks, researchers found that the golden rice was as effective as vitamin A capsules at giving kids a boost of Vitamin A. Furthermore, the rice worked better than the natural beta-carotene in spinach, the researchers report.

Normally, rice plants produce beta-carotene - a precursor to vitamin A - in their green parts, but not the grain that people eat. Golden Rice is genetically engineered to produce beta-carotene in the edible part of the plant.

**Questions:**

How many children die each year from vitamin A deficiency?

Why could golden rice help prevent these deaths?

What is beta-carotene?

What data was collected in the study?

Why would scientists compare people adding golden rice in their diet to people adding spinach to their diet?

What do these words in the article mean:

heralded-

portends-